Suburban Sprawl or Suburban Villages? Defining Planning Principles for New Land Development in Indonesia

Stephen Day
SUBURBAN SPRAWL OR SUBURBAN VILLAGES?
DEFINING PLANNING PRINCIPLES FOR NEW LAND DEVELOPMENT IN INDONESIA

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Abstract: Indonesian land use regulations are increasingly designating areas where urban growth is either targeted or excluded, echoing a similar trend in other Pacific Rim nations. Yet as with growth planning in the United States, there is a near total lack of regulatory direction guiding the form or pattern of urban development within the target areas. Sprawling suburban development, essentially patterned after mid-century-style American models, is rapidly consuming the most desirable developable land. Although significant policy goals and legislation are emerging that may provide the basis for suburban land planning principles, neither the central nor provincial governments have consistently articulated such principles. This Comment suggests that statutes should incorporate not only planning goals, but also specific town-building principles to guide local planning authorities. Growth management policy goals that are at the forefront of planning law in the United States are compared with evolving Indonesian policies and with what is actually being built in response to those policies. Historical shortcomings in U.S. suburban planning suggest that alternatives to automobile-dependent suburban development should be considered in the formation of Indonesian land use law and policy. The Comment describes specific alternative models of development that have been built or are being projected.

I. INTRODUCTION

Within the past five years, the central government of Indonesia has enacted a series of regulations designed to limit or direct land development. Areas that are legally available for new suburban development are being restricted through the creation of development estates\(^1\) and through variations on the "urban growth boundary" technique,\(^2\) a tool for containing growth used in several jurisdictions in the United States.\(^3\) Recent

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1 See, e.g., Presidential Decree, No. 98 (Oct. 23, 1993). See also Indonesia's Industrial Estates, Economist Intelligence Unit, Jan. 1, 1995, available in LEXIS, NEXIS Library, ASIAPC File. These estates are in areas determined by the government to be most suitable for industrial, commercial, residential, or mixed development. Certain ownership and use restrictions are relaxed in order to entice developers to locate projects within these estates.

2 See Lambert J. Giebels, Jabotabek: An Indonesian-Dutch Concept on Metropolitan Planning of the Jakarta Region, in THE INDONESIAN CITY 101, 113 (Peter J.M. Nas ed., 1986). The basic concept of urban growth boundary technique involves counties and regional planning authorities devising long term boundaries within which "urban" growth is to take place, and beyond which is to remain rural or wilderness.

legislation is aimed at developing greater coordination between national and regional development goals, with ultimate planning authority increasingly centralized. Expansion is being significantly limited by the dedication of vast nature preserves, and by the protection of agricultural land. In many parts of the country, lack of reliable water supplies severely inhibits development. Yet sprawling suburban development, patterned after mid-century-style American models, is rapidly consuming the most desirable developable land. Ironically, just as Indonesia is embracing this land pattern, planners and legislators in the United States are seriously questioning the desirability of the automobile-dependent suburb.

The evolution of Indonesian planning law is entering a critical phase in the development of the country, and this process could have significant environmental and economic repercussions outside of that country. A major Pacific Rim economy is emerging in Indonesia. Within the past two years, foreign investment regulations have been substantially relaxed, with direct impacts on foreign involvement with real estate development projects. The biodiversity of the Indonesian archipelago is one of the richest on earth, and potentially one of the most threatened, given the development pressures emerging in the country. Environmental and development consultants from the United States as well as other countries are...
positioning themselves to participate in the development of Indonesian infrastructure. The land planning patterns established by Indonesia in the next decade could serve as models for other rapidly developing countries. But the rapid filling of growth areas with sprawling suburban development has environmental and economic costs, and could lead to an expansion of growth boundaries much sooner than necessary, frustrating the goals of growth containment.

While the Indonesian government has begun to specify particular areas where urban growth is either targeted or excluded, there is a near total lack of regulatory direction guiding the form or pattern of urban development within the target areas. Although disparate policy goals are emerging that may provide the basis for a suburban land development policy, neither the central nor provincial governments have consistently articulated such a policy. Further, the suburban experience in the United States has confirmed that carefully planned, sustainable development is difficult to project, even under the best of circumstances. But the task is much more difficult and unpredictable if policy implementation is left to local authorities and private development groups. This uncertainty is increased if comprehensive plans and plan implementation are based on overly-generalized policy goals.

The evolution of growth management policy goals in the United States has been substantial, with potentially far-reaching impacts for shaping the built environment in the next century. Policy goals are critical to shaping effective growth management legislation, yet the experience in the Pacific states of Washington, Oregon, and California suggests that...
If legislatures are to realize the new suburban patterns hinted at in their growth management policies, they must back those policies with much clearer direction to local authorities regarding the form and pattern of suburbia. This is true for any jurisdiction experiencing intense development pressures, including the planning areas in Indonesia. Tangible models that are based on actual projects and proven principles, if officially recognized and endorsed as physical embodiments of policy, can more effectively direct local planning than policy goals acting alone.

Can an alternative suburban planning policy for Indonesia be articulated in any meaningful way without direct references to specific models of town planning? This Comment suggests that statutes should incorporate not only planning goals, but also specific town building principles to guide local planning authorities. Further, the most defensible strategy a legislature can follow in selecting town planning principles is to adopt those principles with the best-established record of building well-designed, sustainable communities. And there is no body of town planning principles with a record of achievement as extensive as that underlying the traditional, pedestrian-oriented city. The antithesis of this town form is the automobile-dependent suburb, a pattern that has dominated suburban development in borders of cities, with very limited exceptions; compact urban development is the opposite of suburban sprawl; Snoqualmie v. King County, C.P.S.G.M.H.B., No. 92-3-0004 (1993) (cities are primary providers of urban services); Edmonds and Lynwood v. Snohomish County, C.P.S.G.M.H.B., No. 93-3-0005 (1993) (essential planning policy is to reduce suburban sprawl and direct growth to towns and cities); Kitsap Citizens for Rural Preservation v. Kitsap County, C.P.S.G.M.H.B., No. 94-3-0005 (1994) (rural areas cannot receive urban or suburban development, but can conceivably include compact rural development).

21 Oregon’s growth management policies are the most binding of all the U.S. state-level planning goals. See OR. REV. STAT. § 197.225 (1993). A separate Land Conservation and Development Commission was established by the legislature, with seven members appointed by the Governor, subject to Senate confirmation. OR. REV. STAT. § 197.030 (1993). While the Commission has given more specificity to particular resource-related planning goals, the goals concerning the form and pattern of suburban development are too general to avoid extensive litigation and problems with local implementation. See State-Wide Planning Goals and Guidelines, Oregon Land Conservation and Development Commission, Goals 1-19 (1995) in OR. ADMIN. R. 660 (1995).

22 California State planning law is less advanced than the Oregon model in terms of goal development and implementation, yet the legislature has made important first steps in reinforcing growth policy with concrete planning principles for particular types of development. See, e.g., Transit Village Development Act of 1994, Cal. Gov. Code. § 65460 (West 1994).

23 Planning policy in the United States is decided by state and local legislative bodies, against a background of national policy and law. National policies in the United States have been extremely significant in defining this background. See discussion, infra Part II.B, regarding U.S. policy and the creation of suburban land patterns. In contrast, the policies generated by the central government of Indonesia play a much greater role in shaping local plans than does current U.S. federal policy. See discussion, infra Part II.D, regarding Indonesian government policy and structure.
much of the world for the past fifty years.24

The following section of this Comment, Part II, discusses Indonesian land-use law, the suburban development pattern of the country, and Indonesian parallels with early suburban development patterns in the United States. The historical underpinnings of U.S. suburban policy are outlined, along with the importation of the automobile-dependent suburban pattern into Indonesia. Part III reviews Indonesian policies on the environment, agriculture, and industry, and notes the disparities between these policies and suburban development as it is being realized. Growth management policy goals that are at the forefront of planning law in the United States are compared with evolving Indonesian policies and with what is actually being built in response to those policies. Part IV describes specific models of development that have been built or are being projected as alternatives to automobile-dependent suburban sprawl. Among the projects reviewed are recent plans for new-town development in Indonesia and the Philippines, along with extensions of existing towns in Washington and Maryland.

24 The traditional town organized residential areas around a hierarchy of centers, and most centers contained mixed uses (shopping, housing, civic buildings, work places, public spaces). Mixed uses were usually within a reasonable walking distance of the homes in that district. These basic relationships built the great variety of urban places of the world, from the fine-grained patterns of Kyoto to the rioni districts of Italian cities to Main Street America. Because the "walkable" city was the only form of urbanism until the mid-nineteenth century, the study and advocacy of its specific attributes were largely unnecessary until transportation changes threatened to destroy it. Since then, an enormous body of planning research and theory has contributed to a general acceptance in the planning profession of the assumption that the social, economic, and environmental benefits of the pedestrian-oriented suburban town form are superior to those of the automobile-dependent, exclusively-zoned residential suburb. The foundations of the current advocacy of pedestrian-oriented development can be traced through a series of theoretical work and research, beginning in a systematic way with the "City Beautiful" movement at the beginning of this century. See, e.g., CHARLES M. ROBINSON, MODERN CIVIC ART: THE CITY MADE BEAUTIFUL (1903). Contemporaries with this movement were the highly-influential work of Camillo Sitte, a theoretician who saw urban formal relationships as best experienced by the pedestrian-as-actor. See generally CAMILLO SITTE, THE ART OF BUILDING CITIES (Charles T. Stewart trans., 1945) (1909). But since the advent of the automobile age, the superiority of the compact village, town, or city has been articulated by many. See, e.g., RAYMOND UNWIN, TOWN PLANNING IN PRACTICE (1919); LEWIS MUMFORD, THE CITY IN HISTORY (1961). But in urban and suburban areas across the world, automobile ownership has had great benefits, but has altered traditional settlement patterns significantly. A tremendous loss in community cohesion has accompanied that change. See, e.g., JANE JACOBS, THE DEATH AND LIFE OF GREAT AMERICAN CITIES (1961); RICHARD SENNET, THE FALL OF PUBLIC MAN (1977). In response to these trends, modern planning theorists have sought to rediscover the essential design principles of the urban patterns that have dominated urban history for the past two thousand years. See, e.g., KEVIN LYNCH, THE IMAGE OF THE CITY (1960); WILLIAM H. WHYTE, CITY (1988); ALDO ROSSI, THE ARCHITECTURE OF THE CITY (Diane Ghirardo & Joan Ockman, trans., U.S. ed. 1982); VINCENT SCULLY, AMERICAN ARCHITECTURE AND URBANISM (1988); JOSEPH RYKWERT, THE IDEA OF A TOWN (1989). Recently, these theories have gained acceptance in wider circles within the development community. Economic arguments for pedestrian- and transit-oriented communities are increasingly accepted by mainstream financial planners. See, e.g., BANK OF AMERICA, supra note 15. See also discussion infra Part VI.A.
The Comment concludes that state legislative bodies can best avoid ineffective or unsympathetic plan implementation at the local level by reinforcing policy goals with clear planning principles. Enhanced articulation of broad policy goals leads to greater certainty for developers and communities, a valuable element when the successful completion of lengthy development reviews are crucial to a project’s success. This will be increasingly true for both Indonesia and elsewhere, as land development inevitably becomes subject to more complex restrictions.

II. SUBURBAN LAND DEVELOPMENT IN JAVA, INDONESIA: THE IMPORTATION OF THE AMERICAN SUBURBAN LAND USE PATTERN

A. Overview of Suburban Land Development in Indonesia

Indonesia is now the fourth most-populous country in the world, with nearly two hundred million inhabitants. The majority of the population lives on the island of Java, one of the 13,700 islands that make up this tropical nation in the Malay archipelago. Traditionally known as the Spice Islands or the Dutch East Indies, the region was largely under some form of colonial control from the fifteenth century until 1949. The largest city, Jakarta, has now surpassed Los Angeles, California in population, while the second largest city of Surabaya is approximately the size of Seattle, Washington, its United States “sister city.” While only about twenty-five percent of the population is considered “urban,” this figure is misleading, since only a small minority of towns or villages have municipal status with corresponding official boundaries and population figures. Most of the towns or villages, even some larger than 100,000 people, are categorized as desas and are without a municipal governing authority. There are estimated to be three hundred urban places in Indonesia with at

27 Id. at 1.
28 Larry R. Ford, A Model of Indonesian City Structure, GEOGRAPHICAL REV., Fall 1993, at 374.
29 Country: Indonesia, supra note 26, at 1.
30 Ford, supra note 28, at 374.
31 Ford, supra note 28, at 374. Land use and other regulation of the desas is generally the responsibility of the regional authorities.
least 20,000 inhabitants. Accordingly, while a shrinking majority of the population is employed in agriculture, a large proportion of the population lives in villages, towns or cities, rather than in isolated family groups or suburban bedroom communities.

Indonesia is at a historically significant transition point, analogous in many ways to the situation of the United States at the beginning of this century. Just as American cities were gaining in population as farm workers were lured to the cities in search of jobs, a steady stream of Indonesians are leaving the agricultural villages for economic opportunities in places such as metropolitan Jakarta and Surabaya. But the major cities are increasingly home to either the wealthy, living in luxury housing, or those with low to middle incomes, mainly living in the kampung settlements that form an integral part of the Indonesian urban fabric. Although suburbanization in one form or another has been a constant in the historical development of the Indonesian city, the pace and character of suburban development has entered a new phase. The rapid expansion of the middle class parallels that of the United States early in this century, and a corresponding expansion of suburban housing developments has begun. Just as western influences have provided Indonesia with models for town plans and urban building types, the current models for suburban development are imports as well. The great majority of new suburban developments are generally modelled after the automobile-dependent North American suburban house types. Sprawling, autonomous subdivision projects are in progress throughout the metropolitan Jakarta and Surabaya regions, with some of the greatest activity taking place in the Tangerang area.

33 John McBeth, Water Peril: Indonesia's Urbanization May Precipitate a Water Crisis, FAR E. ECON. REV., June 1, 1995, at 61.
34 Ford, supra note 28, at 383.
35 The kampung settlements are generally fairly dense urban districts that include both single family and multi-family housing, mixed with neighborhood commercial uses. A lack of clear title to these lands is one of the factors distinguishing them from other developed urban property. Physical conditions vary widely from slum-like to extremely well-maintained. The historical underpinnings of these districts are often complex, in some cases dating back to early Dutch settlements. See generally Michael Leaf, Land Rights for Residential Development in Jakarta, Indonesia: The Colonial Roots of Contemporary Urban Dualism, 17 INT'L J. OF URB. & REGIONAL RES. 477 (1993).
36 Ford, supra note 28, at 377.
37 Tanzer & Mao, supra note 10, at 112.
38 C. N. Van der Heiden, Town Planning in the Dutch Indies, 5 PLANNING PERSPECTIVES 63 (1990).
39 See Orange County, Java, supra note 8, at 58.
40 Emily Thornton, Buyer's Paradise: Lippo Land Brings Suburbia to Jakarta, FAR E. ECON. REV.,
there was not a single shopping mall in the Jakarta region, there is now nearly ten million square feet of mall space, and that figure will double by 1997 if currently projected plans are realized.  

Given the scattered siting and the automobile-dependent nature of the building types, these projects seem to be seriously at odds with the stated environmental and transportation planning goals for the region. Traffic congestion in the Jakarta metro region is among the worst in the world, with corresponding economic and environmental problems. The traffic crisis has reached the point that the city of Jakarta no longer allows entry of private automobiles unless there are at least two passengers in each car in addition to the driver. In response to this escalating crisis, President Suharto has recently approved plans for the first phase of a subway system for Jakarta, and a toll road system with light rail transit is being seriously considered.

While expensive transportation infrastructure systems depend upon "nodes" or urban points where transit stations can efficiently serve towns and development near them, the initial patterns of late twentieth century Indonesian suburbs are beginning to follow an American, freeway-dependent model of development. The development pattern of the country is not yet dictated by a diffuse distribution system. But Indonesia is fast approaching a watershed decision point in its transportation investment strategy. And there are few factors more important than transportation networks in determining the form of towns, cities, and neighborhoods.

One possibility is that the country will continue on a development path similar to that taken by United States over half a century ago. Infrastructure and planning decisions favored automobile-dependent, segre-

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[41] Id.
[43] Id. at 70.
[45] Cohen, supra note 42, at 70.
[46] In an effort to help shape the country’s transportation strategy, the United States government in the 1950's contributed the expertise and funds in the classic mid-century suburban manner: Congress appropriated money for the construction of a giant cloverleaf interchange near Jakarta. Ford, supra note 28, at 379-80.
[47] This is a departure from the historical Indonesian pattern of linear development, where settlement rarely occurred at any great distance from the main highways linking the principal cities. Ford, supra note 32, at 378.
gated use suburban developments, with an unnecessarily large loss of wilderness and agricultural lands, loss of wildlife habitat, and loss of community cohesion. An alternative is that Indonesia will opt out of a massive freeway-building program and instead invest in an integrated system of public transportation and highways. The relatively undeveloped state of the Indonesian transportation system presents an opportunity for innovative growth management policy and regulation to develop before massive infrastructure investments freeze the pattern of suburban sprawl. And it is here that clear government regulatory policy becomes critical. Indonesia enjoys the enviable position of being able to avoid the economic and social costs of suburban sprawl that the United States has experienced.

B. Overview of Suburban Land Development in the United States: The Importance of Government Policy in the Expansion of the Automobile Suburb

To understand the forces behind the importation of suburban development models from the United States to Indonesia, it is necessary to review briefly how land use law has been used to codify the U.S. suburban landscape. Federal highway and housing policies combined in the 1940s through the 1980s to make housing development in existing towns and cities much more difficult than building automobile-dependent, segregated-use suburban projects. While the traditional American town prior to World War II principally contained single family houses, multifamily apartment buildings were located there also. This also tended to promote affordable housing and a variety of densities, both of which are housing-related goals that are now encouraged in recent growth management legislation. Commercial uses in the historic cities and towns of the United States were mixed with residential uses, so that basic services (groceries, hardware, restaurants, pharmacies, etc.) were generally located near the town center and within reasonable walking distance of residences. But this notion of

50 Cohen, supra note 42, at 70.
53 See generally MUMFORD, supra note 24.
placing mixed uses and housing types near single family houses began to acquire negative connotations, and by 1936 more than 1,300 cities (eighty-five percent of total) had adopted segregated-use zoning ordinances.  

Federal and state policy, followed by significant supporting regulations, has played a fundamental role in determining the form, pattern, and density of the American suburb. Given the growing preference for detached, single-family housing developments and given that this housing was increasingly isolated from other uses (including employment opportunities, shopping, and other commerce), the national market was ready for the explosion of automobile production. The next critical elements in shaping the mid-century suburban pattern involved housing financing and highway construction. The combined effect of The Home Owners Loan

54 JACKSON, supra note 48, at 242. Although certainly used as a means of excluding nuisances and preventing congestion, there was no secret that zoning was very popular as a means of excluding low income residents from particular sections of towns through the limitations on housing types and lot sizes.

55 A supporting rationale for segregating uses and residential types was provided by the Supreme Court when Justice Sutherland grouped "stores, shops and factories" in the category of offensive intruders in residential areas, due to "the confusion and danger of fire, contagion and disorder" that he stated were associated with them. Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 391 (1926). Shopping and employment within walking distance of one's home has been more difficult since that day, as has the development of compact suburban communities that are efficiently served by public transit. And Justice Sutherland went further. Single-family homes were given a clearly-preferred status over multi-family structures: "Very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district." Village of Euclid, at 394. This sentiment, encouraging segregated use, low density development, was not particularly unusual for the time. In a Massachusetts Supreme Judicial Court case decided two years before Euclid, the detached single family house, segregated from all other house types and distant from all uses, was held up as the highest use and the standard to which all should aspire: "It may be a reasonable view that the health and general physical and mental welfare of society would be promoted by each family dwelling in a house by itself," a view that is supported with a list of reasons including "the reduction in the spread of contagious diseases." Brett v. Bldg. Comm'r of Brookline, 145 N.E. 269, 271 (Mass. 1924). Segregation of house types is discussed here and in Village of Euclid in terms of segregating entire districts, as opposed to a more integrated system of use/bulk classifications, such as where apartment houses are located on broad avenues while houses are located on narrower intersecting streets. The earliest American example of this type of integrated system is the New York City Zoning Code. Following Euclid, the rationale for separating single family housing from other types has usually relied on arguments against the negative aspects of density. These negatives have included increased fire hazards, noise, smoke, traffic congestion, accidents, lack of open space and light. See, e.g., Village of Euclid at 391. Yet other cases have questioned the assumption that single family housing is necessarily less dense than other multi-family housing. Ordinances allowing up to twelve roomers in a single family boarding house, while prohibiting two-family houses have been criticized. Merrill v. City of Wheaton, 190 N.E. 918 (Ill. 1934). Exclusivity of house types was subsequently upheld in the same jurisdiction. Cosmopolitan Nat'l Bank v. Village of Mt. Prospect, 177 N.E.2d 365, 369 (Ill. 1961). A rare judicial opinion that points out the possibility that apartment houses are not inherently negative comes from a case in Raleigh, North Carolina, where the court looked skeptically on the Euclid assumptions about density and noted that apartments could conceivably "compliment the area where they are located." Allred v. City of Raleigh, 173 S.E.2d 533, 538 (N.C. App. 1970), rev'd on other grounds, 178 S.E.2d 432 (N.C. 1971).
Corporation\textsuperscript{56} and The Federal Housing Administration\textsuperscript{57} on urban and suburban development has been extremely powerful. Through the stated preference for insuring loans on new, detached single-family houses,\textsuperscript{58} their early rankings which encouraged the segregation of races,\textsuperscript{59} and a general assumption that cities would deteriorate over time and suburbs were stable,\textsuperscript{60} these programs inhibited needed homeowner financing in urban areas and concentrated it in suburbia.\textsuperscript{61} The combination of all of these factors encouraged an accelerated flight to the suburbs.\textsuperscript{62} Ironically, the most compelling argument for a dispersed pattern of suburban development is one that is now much diminished in the United States, and one which has never been of particular importance for Indonesia: the threat of massive nuclear attack on urban areas.\textsuperscript{63}

\section*{C. International Influence on Planning and Development in Indonesia}

The suburban experience in twentieth century America points to the


\textsuperscript{58} JACKSON, supra note 48, at 196-97, 208-09.

\textsuperscript{59} JACKSON, supra note 48, at 197, 201, 208.

\textsuperscript{60} JACKSON, supra note 48 at 198, 209.

\textsuperscript{61} Even well-maintained and valuable real estate in older cities was denied access to funding for loans, if the housing forms were traditional brownstones, rowhouses, or apartments. JACKSON, supra note 48, at 208.

\textsuperscript{62} RICHARD PLUNZ, A HISTORY OF HOUSING IN NEW YORK CITY: DWELLING TYPE AND SOCIAL CHANGE IN THE AMERICAN METROPOLIS 207-45 (1990). This is the definitive work on the architectural and social history underlying the development of New York building types. It also serves as an important reference on the effects of government intervention in U.S. suburban development generally.

\textsuperscript{63} An added impetus for decentralization came in the form of a massive highway program, and the Cold War fear of nuclear attack provided one of the most compelling policy arguments behind the phenomenal investment necessary to build it. The \textit{Bulletin of Atomic Scientists} issued recommendations for dispersing population into suburbs and satellite towns to minimize nuclear destruction. \textit{NSRB Dispersion Policy}, 9 \textit{BULLETIN OF ATOMIC SCIENTISTS} 263 (1951). President Eisenhower appointed a member of the Board of Directors of General Motors to chair a commission to study the need for a huge new interstate highway system, and a need was found. \textit{See generally} MARK H. ROSE, \textit{INTERSTATE: EXPRESS HIGHWAY POLITICS, 1941-56} (1979). The result was the Federal Aid Highway Act. Federal Aid Highway Act, June 29, 1956, ch. 462, tit. I, 70 stat. 374 (current version at 23 U.S.C. § 101 note (1995)). This legislation approved a US$26 billion (1956 dollars) road building project, with 90% paid by the Federal Government. JACKSON, supra note 48, at 249-50. President Eisenhower's stated reasons behind the approval of the plan included the need for better traffic flow and the quick evacuation of nuclear target areas. Nothing was said about the likely effects on the suburban/urban balance, but the likely effects were clear. JACKSON, supra note 48, at 249. City residents effectively subsidized the decline of their own communities, as the interstate system sliced through the centers of most cities and provided a network for decentralization.
power of policy combined with specific implementing regulations in the development of a rapidly expanding country. In the absence of clear policy in Indonesia, the default pattern for development has been dictated by the independent planning policies of large landholders. But rather than following a distinctly indigenous pattern of suburban development, Indonesian developers have followed the historical tendency for developing countries to import design concepts from colonial powers or countries with particular development expertise.\textsuperscript{64} While the traditional Indonesian town had a clear typological structure that pre-dated European influence, the influence of the Dutch on the urban landscape of Indonesia has been significant.\textsuperscript{65} The sixteenth century plan for the city of Bantam (now Jakarta) repeated standard Dutch exports used in its fortified port cities,\textsuperscript{66} including the plan used soon afterwards for New Amsterdam (now New York City). Town building in Indonesia is in many ways tied to developments in western planning and legal theory, and this has been true for nearly five hundred years. This was formally codified by the beginning of this century, and the Dutch-created \textit{Town Planning Act} is still applicable in Indonesia. Dutch-imposed building ordinances are also still in effect in many instances.\textsuperscript{67}

Even after independence in 1949, Dutch planners have participated in specific planning exercises, including a master plan for metropolitan Jakarta ("Jabotabek")\textsuperscript{68}. But the planning philosophies common to the United States have only recently begun to influence the pattern of suburban development in Indonesia until the late 1980s. In the past five years particularly, U.S. consultants have been increasingly involved.\textsuperscript{69} With last year's relaxation of international investment restrictions,\textsuperscript{70} U.S. and other foreign investment in Indonesia is likely to grow.\textsuperscript{71}

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\item \textsuperscript{64} Van der Heiden, \textit{supra} note 38, at 70-82. This is true of the United States as well, as evidenced by the initial importation of suburban patterns from projects developed in England. \textit{See generally The Anglo-American Suburb}, 51 \textit{ARCHITECTURAL DESIGN} 69-96 (1981).
\item \textsuperscript{65} Van der Heiden, \textit{supra} note 38, at 63.
\item \textsuperscript{66} Van der Heiden, \textit{supra} note 38, at 64.
\item \textsuperscript{67} Van der Heiden, \textit{supra} note 38, at 81.
\item \textsuperscript{68} The term is an acronym for Jakarta and its surrounding towns of Bogor, Bekasi, and Tangerang.\textit{Ford, supra note 28, at 383.}
\item \textsuperscript{69} \textit{Orange County, Java, supra} note 8, at 58.
\item \textsuperscript{70} Tazner \& Mao, \textit{supra} note 10, at 113.
\item \textsuperscript{71} This is especially true given that the newly relaxed standards involve infrastructure investments and construction, including road building, telecommunications, and power generation, areas with strong U.S. expertise. Tazner \& Mao, \textit{supra} note 10, at 113.
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D. **Current Indonesian Planning Law and Policy**

1. **Overview of Indonesian Land Use, Real Property, and Regulatory System**

Indonesian land use law is based on both customary law ("Adat" law) and statutory law. But underlying this is a complicated system of land rights, essentially due to the dual legal system imposed by the Dutch in the seventeenth century. Colonial settlers' property rights were governed by Dutch law, while indigenous peoples' land rights were established by the traditional system of communally-based land tenure. The 1945 Indonesian Constitution stipulates that Dutch colonial law is valid only so far as it does not conflict with the essential policies of the state, as summarized by the *Pancasila* in the Preamble of the Constitution.

The "Five Principles" of the *Pancasila* are seen as the foundation for the constitution and of all Indonesian legal decisions. The constitution itself establishes the five branches of the government, with both the House and the President given power to initiate legislation. The structure of the President's Cabinet and the appointment of the Ministers in that body are determined by the President. The Ministers yield considerable power over their individual jurisdictions, however, and are central to land use decisions and policy. The administrative framework related to "strategy and policy direction" for Indonesian land-use planning is hierarchically divided between national, regional, and local/municipal planning authorities. But
even for local land planning, ultimate authority for policy formulation is at the national level.\textsuperscript{80} The most essential statutory basis for modern Indonesian land use is that of the Basic Agrarian Law of 1960 ("BAL"),\textsuperscript{81} which was originally intended to supersede the dual land system left from Dutch law, providing for a new system of national land registration.\textsuperscript{82} Nonetheless, the preexisting land ownership systems survive in a clouded existence, complicating the transfer of land that has not been registered. But land that is accumulated for "real estate" development, by definition, must be registered.\textsuperscript{83}

As a way of simplifying the process of land investment for large scale industrial, commercial, and residential uses, including suburban development projects, the government is developing a system for transferring pre-assembled blocks of land in "industrial estates." This system is intended to allow the government to direct and contain development while encouraging controlled foreign investment,\textsuperscript{84} a variation on the urban growth boundary technique. The policy purposes behind the

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\item \textsuperscript{80} Concerning Spatial Use Management No. 24, ch. V, art. 29.
\item \textsuperscript{81} Undang-Undang Pokok Agraria [Basic Agrarian Law], No. 5-1960, State Gazette No. 184-1960 [hereinafter BAL].
\item \textsuperscript{82} Id. pt. II, art. 19.
\item \textsuperscript{83} Leaf, supra note 35, at 488. In the Indonesian language, "real estate" refers specifically to housing developments produced by private development companies. Leaf, supra note 39, at 488 n.13. Real property can be obtained from the State or from individuals, subject to the rights of the grantor with respect to encumbrances and planning regulations. Boedi Harsono, Development of the Indonesian Land Law from Adat Law to Modern Times, in BUSINESS AND INVESTMENT LAWS IN INDONESIA, Proceedings of the First Indonesian-Singapore Law Seminar, 93, 102 (1993). Registration of previously unregistered land must be performed by a Land Deed Official (Pejabat Pembuat Akta Tanah or "PPAT") and acknowledged by the village head and another village administrator, who act not merely as witnesses but as guarantors of the transaction. Land rights consist of whatever rights were purchased, and can amount to something approaching a fee simple for Indonesian citizens. These rights are protected by the 1945 Constitution and by the Basic Agrarian Law. BAL, supra note 81, pt. III, arts. 20, 21. A fee simple is referred to as a primary title, as are leases for agricultural or development purposes. Harsono, supra, at 97-98. The Hak Milik ("HM") is a fee simple. An agricultural lease, limited to 25-35 years with extensions for an additional 25 years, is the Hak Guna Usaha ("HGU"). Building development rights, limited to 30 years with possible extension of an additional 20 years, are referred to as the Hak Guna Bangunan ("HGB"). All of these primary titles are inheritable, transferrable, and can be used as collateral. All land in the territory of Indonesia is defined in the BAL as a "Gift of God." BAL, supra note 81, art. 1. See also Concerning Spatial Use Management, No. 24, pmbl. (1992). The State has the power of eminent domain for public purpose acquisitions, as long as just compensation is paid. The power of expropriation is only by Presidential Decree, which also fixes the compensation. This is subject to judicial appeal. BAL, supra note 81; and Law 20-1960, as noted in Harsono, supra, at 104-05. Rights of ownership are available only to Indonesian citizens, and by particular Indonesian organizations. Badrulzaman, supra note 72, § 2.60.28. However, foreign capital investment is allowed if the investors purchase shares of an Indonesian limited liability company, referred to as a perseroan terbatas and abbreviated as "PT." Mohammed Idwan Ganie, Property Investments in Indonesia, in BUSINESS AND INVESTMENT LAWS IN INDONESIA, supra, at 105-06.
\item \textsuperscript{84} Harsono, supra note 83, at 104.
\end{itemize}
use of industrial estates are economic and environmental, and offer insight into broad national goals that are in conflict with the reality of Indonesian suburban development.

III. CONFLICTS BETWEEN EMERGING INDONESIAN LAND USE POLICY AND AUTOMOBILE-DEPENDENT SUBURBAN DEVELOPMENT

A. Fundamental National Policy Goals Related to Indonesian Land Use

As discussed, the five principles of the Pancasila provide the foundation for all Indonesian national policy goals. The various articles of the Constitution elucidate these principles. Article 33 establishes the system of “Economic Democracy,” where the economy of the nation is seen as an essentially common endeavor with basic natural riches ultimately controlled by the State for the use of Indonesian citizens. Individual land rights are recognized so far as they do not conflict with the long-term goal to achieve the greatest possible prosperity for the greatest number of citizens.

In practice, this has been interpreted liberally in favor of exploitation rights, yet a variety of environmental, political, and economic concerns are emerging to temper the extent of private development of Indonesian land and resources.

The right to “decent housing in a healthy, safe, harmonious, and orderly environment” is legally protected. The sustainability of Indonesian natural resources “harmoniously and in a balanced way for the welfare of Indonesian people . . . and all humankind for present and future generations is a statutory policy goal of the republic, while “the preservation of plant and animal species shall be implemented both inside and outside natural sanctuaries.” Furthermore, the law specifies that plant and animal ecosystems in the country’s “natural sanctuaries” are to be

85 Badruzaman, supra note 72, § 2.60.10.
86 Badruzaman, supra note 72, § 2.60.20.
87 Badruzaman, supra note 72, § 2.60.20.
88 The Law on Real Estates and Residential Areas, ch. III, art. 5(1) (1992). A significant Indonesian planning goal that has progressed to legally recognized status is that requiring large scale residential developments to include a minimum number of affordable housing units. This issue of including affordable housing in suburban development projects has long been a source of zoning litigation in the United States, where the general separation of large tracts of single family housing from other uses and housing types has frustrated efforts to integrate mixed income households.
89 Conservation of Living Natural Resources, pmbl. (a); arts. 2, 3.
90 Id. art. 13(1).
maintained "in their original condition." A system of National Parks, Grand Forest Parks, Nature Recreation Parks, nature reserves, and wildlife sanctuaries is being established with varying degrees of human activity allowed, ranging from limited "sustainable" resource exploitation to tourist activity to scientific research. Law 5-1990 is seen as a comprehensive national environmental act, with explicit policies of sustainable utilization and protection of ecosystems. But recent legislation has established a new policy base for development attitudes towards exploitation of all lands, inside and outside of preservation areas, and specifically rejects previously accepted concepts of maximum utilization. Sustainability of resources and protection of ecosystems is now the statutorily-protected bedrock of Indonesian land-use policy.

The translation of policy goals into "sustainable" suburban development practices is one of the challenges resulting from this sweeping legislation. Yet, so far, little has been accomplished to meet this challenge beyond restricting the area within which development takes place.

B. Recent Restrictions on Urban Growth in Indonesia

Areas targeted for urban growth in the metropolitan Jakarta region were described in the regional plan prepared by the central government in 1990. As discussed, urban development outside of these growth areas is being limited further by the establishment of conservation areas, in part as a response to the growing economic importance of the Indonesian tourism industry placing further pressure on the government to protect the biodiversity conservation plan of 1991-92 established a strategy for the continued conservation of the 31 national parks (totaling nearly 20 million acres, or about 10% of the area of the country), along with the management of an additional 100 million acres of terrestrial areas (an additional 50% of the land mass) in addition to 50 million acres of coastal marine habitats. The Law on Real Estates and Residential Areas, ch. IV, art. 18(1) (1992). See also Concerning Spatial Use Management, No. 4, § II, art. 2 (1992), where planning is required to be "integrated, effective, and efficient, harmonious, balanced, and sustainable."

Large scale residential development should be "planned in a comprehensive and integrated manner" but policies, goals, and principles that could clarify this statement are lacking. The Law on Real Estates and Residential Areas, ch. IV, art. 18(1) (1992). See also Concerning Spatial Use Management, No. 4, § II, art. 2 (1992), where planning is required to be "integrated, effective, and efficient, harmonious, balanced, and sustainable."

Nearly 40 million Indonesians are directly dependent on sustainable yields of forestry products, agriculture, livestock, and fisheries, which together accounted for about 19% of the country's 1992 GDP. The World Bank, supra note 12. Background § 2.

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country's lush tropical forests and coastlines. Additionally, a series of presidential decrees have restricted the conversion of agricultural land to non-agricultural use. National policy goals of agricultural self-sufficiency have led to potentially far-reaching limitations on conversion of actual (or even potential) agricultural land for development purposes. Indonesia's abundance of ancient cultural sites pits development interests against well-organized land preservation groups and religious organizations. This trend is demonstrated by a recent conflict over a luxury resort project on Bali.

C. The Disparity Between Indonesian Policy and Built Reality

It is a truism that the net result of evolving Indonesian policies, regulations, limits, and social forces is that more and more Indonesians will be seeking fewer and fewer tracts of developable land. Yet in the absence of clear governmental planning principles, large landholders are directly shaping their own land-use policies through the construction of independently planned suburban development projects. But rather than meeting the challenge of environmental "sustainability" as set forth in national policy, the vast majority of Indonesian suburban development projects are no more environmentally supportive than the typical American subdivision.

Article 33 of the Indonesian Constitution includes water among the

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99 The Business Environment, supra note 6, at 1.
100 The government is also pursuing vast marshlands reclamation projects in areas outside of Java for eventual rice production. John McBeth, Swamp for Sale, FAR E. ECON. REV., Sept. 7, 1995, at 105-06.
101 Even though opponents to the project admitted that it was admirable in its environmental design sensitivity and a clear economic boost for the local population, the proximity of the 250-acre resort to one of Bali's most revered Hindu sites led to a nation-wide debate on land use, local control, and public participation. The development conflict illustrates several factors that are becoming significant in the Indonesian land use debate: a growing interest in cultural preservation, in environmental protection, and an increasing willingness of Indonesians to question local land use decisions when they conflict with larger goals. Margot Cohen, God and Mammon: Luxury Resort Triggers Outcry Over Bali's Future, FAR E. ECON. REV., May 26, 1994, at 28.
102 Thornton, supra note 44, at 74.
103 Conservation of Living Natural Resources, art 2.
104 The reliance on septic systems is widespread in the metropolitan Jakarta area, with attendant negative impacts on ground water and wildlife. Orange County, Java, supra note 8, at 58. The lack of safe drinking water in the country has been identified as a continuing impediment to economic growth. Karp, supra note 7, at 55. Less than 35% of the Jakarta region is served by piped water, with the remaining population depending on bottled water or relying on wells that are vulnerable to pollution. McBeth, supra note 33, at 62.
natural resources that are considered fundamental rights, so that any municipal plans to expand service must include all economic groups. And those new town developments that have installed their own sewer systems are typically segregated-use communities dependent on private automobile use. This piecemeal planning of infrastructure is resulting in an uncoordinated array of automobile-dependent private developments, with serious overcrowding of suburban and urban highways. The resulting traffic levels, with related travel time lost, traffic injuries, vehicle operating costs, and road maintenance are enormous. And a well-publicized transit financing study concluded that a massive public transportation investment program approved this year would lead to economic benefits exceeding the capital costs of the project.

Indonesia's fundamental policy goals include economic and environmental sustainability; ecosystem and habitat protection; integration of a range of income groups within new development areas; conservation of prime agricultural and forest areas; conservation of historic and cultural sites; and air, water, soil and other natural resource conservation. None of these goals are well-served by a continuing expansion of privately-planned, automobile-dependent suburban development. The Indonesian people are, for the first time, obtaining the technological means to allow development to sprawl across previously remote areas of the country. Steady expansion of the middle and upper classes promises an explosion in automobile ownership.

The past fifty years of experience with land development in the United States has produced a substantial body of data to indicate that the sprawling suburban land pattern "is the most expensive form of residential development in terms of economic costs, environmental costs, natural resource consumption, and many types of personal costs."

Considering that several United States jurisdictions have included policy goals as the foundation of their growth management legislation, goals that are similar

105 Orange County, Java, supra note 8, at 58.
106 This is in addition to an estimated 26% reduction in carbon monoxide and 40% reduction in sulphur oxides that the public transit scheme's combination of cleaner-operating buses and rail could provide, as opposed to the present pattern dependent on automobile and bus commuting into the city. Cohen, supra note 42, at 71.
107 Tanzer & Mao, supra note 10, at 112.
in spirit, but are often more explicit than the Indonesian policy goals, how effectively have local planning authorities responded to these goals?


The planning goals supporting Washington State's Growth Management Act are intended to provide guideposts for local planning efforts in preventing sprawl and shaping stable, diverse communities. These policy goals are some of the most explicit of any stated goals supporting recent growth management legislation in the United States. The Washington Growth Management Act ("GMA") was first enacted in the climate of escalating suburbanization, including a rapid loss of agricultural and wilderness lands; a dramatic expansion of segregated use, automobile-dependent subdivisions surrounding the larger cities in the state; a growing public perception that suburban and urban areas were expanding out of control; and a growing perception that the unique natural qualities of the region were being destroyed by suburbanization. But the pressure to legislate against suburban sprawl did not ultimately come from city dwellers, but from commuters in the central Puget Sound region, suburbanites who were experiencing first-hand the effects of worsening traffic, environmental degradation of land and water, and loss in the quality of community life.


110 The goals are seen as essential first steps in addressing growth management, especially in locations with strong urbanization pressures juxtaposed with complex environmental and resource management pressures. The Washington policies are therefore relevant to a discussion of suburbanization policies in the development of growth management laws for Indonesia. The planning goals were adopted "to guide the development of comprehensive plans and development regulations." WASH. REV. CODE § 36.70A.020 (1992).


112 Richard L. Settle & Charles G. Gavigan, The Growth Management Revolution in Washington: Past, Present, and Future, 16 U. PUGET SOUND L. REV. 867, 871 (1993). The Act requires counties and cities over a threshold size to prepare comprehensive plans in response to a set of mandatory elements. WASH. REV. CODE § 36.70A.070. The elements include land use, housing, capital facilities, utilities, rural elements if applicable, and transportation. It is this comprehensive plan that serves to guide detailed implementation and formulation of development regulations. But at least in theory, the guiding principles and foundation for the comprehensive plans and development regulations are the GMA planning goals. WASH. REV. CODE § 36.70A.020(1)-(13). The goals emphasize: (1) locating growth in existing urban areas; (2) conversion of undeveloped land into low density sprawling development; (3) encouraging
Yet, after five years of experience with urban growth areas in Washington State, there is mounting evidence that the tool of urban growth areas by itself will not alone contain development. They must be supported with more specific regulatory direction. As it stands, the policy goals of building sustainable communities within growth areas are not being satisfied either by the reliance on growth boundaries or by the reliance on standard market housing production. Likewise, the Indonesian goals of environmental sustainability are not being served by the optimistic hopes that market forces by themselves will provide for comprehensively-planned communities. Environmental planning goals in Indonesia and the United States aimed at decreasing the dependence on the private automobile are being frustrated by the continuing proliferation of automobile-dependent suburbs. It is questionable whether such generalized policy growth planning goals can be effective in the absence of clearer principles established by state or provincial governments.

Specific regulatory direction from the Washington State legislature concerning the form, pattern, and density of urban settlements is almost completely absent from the Growth Management Act. Implementation of the policy to reduce the expansion of “sprawling, low density development” has been assigned to authorities at the county and city level. Given local pressures limiting the planning capabilities of

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multimodal transportation; (4) a variety of housing types; (5) economic development; (6) protection of property rights; (7) efficient permitting process; (8) sustainable resource management; (9) protection of open space and recreation areas; (10) protection of the natural environment; (11) citizen participation in the planning process; (12) concurrency of public facilities and services; and (13) historic preservation of sites and structures. The Act’s requirements are fundamentally procedural rather than substantive, leaving interpretation of the planning goals essentially up to the local planning authorities, with an underlying assumption that the process of devising the plan will help to move local officials into the realm of policy compliance. Settle & Gavigan, supra, at 905. While this may seem optimistic, there are substantive requirements that are intended to make the comprehensive plan reflect the planning goals. The most fundamental requirement is the use of urban growth boundaries, requiring counties who compile plans to designate urban growth areas (“UGAs”) within which growth is to be directed. WASH. REV. CODE § 36.70A.110 (1992).


George Foster, Rural Traffic in King County Clogs Up As Cars Overflow Roads, SEATTLE TIMES, Nov. 27, 1995, at A1; see also Orange County, Java, supra note 8, at 58.

Settle & Gavigan, supra note 112, at 896.


individual jurisdictions, and the lack of effective physical planning coordination among them, the bulk of development projects completed in the past five years have applied typical low-density suburban development models to designated growth areas. Consequently, the areas identified for growth are in danger of being filled much faster than necessary, and this will likely lead to a redrawing of growth boundaries much sooner than originally projected. The low-density suburban model is proliferating in spite of the planning goals, a model that is shaped and defined by the automobile. This proliferation frustrates efforts to achieve transportation goals that are at the heart of growth management and runs counter to the fundamental GMA goal to stop suburban sprawl.

Continued dependence on generalized policy goals and procedural devices, rather than substantive direction and articulated planning principles, is based on legislative reluctance to impose any greater development control on local jurisdictions than is necessary. This has been reiterated by subsequent Growth Management Hearings Board decisions. And where counties and other local jurisdictions have either intentionally or mistakenly produced plans that substantially violate the planning goals, the Boards have found it necessary to provide extensive clarification of basic principles underlying the goals, principles that are only hinted at in the statutory goals themselves.

120 Foster, supra note 116, at A1.
121 Dearborn & Gygi, supra note 113, at 975.
123 In early drafts of the Act, policy goals were not merely "guides" to planning. Initial language stated that "plans shall conform to the goals." ESHB 1025, 1st exs. 1990 (proposed WASH. REV. CODE § 36.70A.020) at 9 (emphasis added).
124 The Hearings Boards were established by the GMA (WASH. REV. CODE § 36.70A.250-345) to hear and determine petitions related to local compliance with the Act, with the State Environmental Protection Act, and matters related to population projections by the local jurisdictions.
125 For example, in a recent decision by the Central Puget Sound Board, the Board "officially recognized" specific planning principles that could support the GMA planning goals. Aagard v. City of Bothell, C.P.S.G.M.H.B., No. 04-3-0011 (1995). In instances where local jurisdictions have vigorously sought innovative means to meet the goals, the boards have strongly supported these efforts in identifying guiding principles through the comprehensive plan process. See West Seattle Defense Fund v. City of Seattle, C.P.S.G.M.H.B., No. 94-3-0025 (1995). The "urban village" strategy developed by Seattle for its comprehensive plan was distinguished for its "admirable" development of planning principles designed to meet GMA goals. The City of Seattle's comprehensive plan is based on encouraging growth in pedestrian-oriented, mixed-use development, located at existing or new neighborhood centers. The policies and goals of the plan are specific to Seattle, but are closely related to many of the principles underlying the models discussed in this Comment. See generally CITY OF SEATTLE, TOWARDS A SUSTAINABLE SEATTLE: THE COMPREHENSIVE PLAN MANAGING SEATTLE'S NEW GROWTH (1994).
126 See Central Puget Sound Growth Management Hearings Board cases, supra notes 18, 20.
127 One part of the statute that begins to describe essential planning principles is the section
After a five-year trial period for the GMA policies, it is becoming clear that an obvious problem with this process is not that the goals go too far, as some feared when the legislation was being drafted. Instead, the lack of specific town-building principles has resulted in an extended planning process that is unclear and that produces litigation. With no clear, comprehensive principles established by the legislature to guide local decisions (beyond the generalized planning goals) the danger is that local jurisdictions will expend enormous efforts and public/private resources in the development of a comprehensive plan that risks invalidation when it is complete. This is precisely what has happened recently, when an entire county plan with all of its development regulations was rejected by the Board. Extensive litigation is almost sure to follow.

IV. ALTERNATIVE MODELS FOR SUBURBAN DEVELOPMENT AS A BASIS FOR PLANNING POLICY GOALS

The challenge for legislators (whether in Indonesia or the United States) is that of defining planning principles with sufficient clarity to communicate an end product of development, yet at the same time allow needed flexibility and autonomy at the local level. One means of communicating principles is to use a reference that is clearly understandable. Outside of strict numerical guidelines (on density, lot coverage, extent of growth areas, etc.) some of the clearest references include guidelines and describing new "fully contained communities" proposed for sites outside of urban growth areas. WASH. REV. CODE § 36.70A.350 (1992). Requirements for transit-oriented development and the inclusion of mixed uses are included here, but are not required for other areas. The lack of specificity in the planning goals is therefore not due to legislative reluctance to design planning principles for local jurisdictions. The legislative findings supporting GMA confirm the central importance of comprehensive planning that crosses local and regional planning areas. The legislative duty to establish policy principles has recently been underscored in the Washington Administrative Procedure Act ("WAPA") legislative findings. WASH. REV. CODE § 34.05.220 (1995). Legislative policies are to be "clearly understood, fairly applied, and uniformly enforced." These WAPA findings imply that the GMA concept of "bottom up" planning efforts, WASH. ADMIN. CODE § 365-195-010(3) (1995), must be balanced against the fundamental need for clear planning principles to be established "by those directly accountable to the public, namely, state legislators." WASH. REV. CODE § 34.05.220 (1995). Planning principles that clarify policy could be established by the legislature through the creation of a special administrative body, as in Oregon, supra note 21, or conceivably through expanded powers of the GMA hearings boards. It is unclear from the language of the Act if the boards have the power to establish these principles themselves, without the formal participation of the legislature. Board rule making is limited to "rules of practice and procedure." WASH. REV. CODE § 36.70A.270 (1995). The provisions of the Washington APA are applicable to the GMA boards, and administrative agencies in Washington are "encouraged to convert long-standing interpretive and policy statements into rules." WASH. REV. CODE § 34.05.230 (1995).

principles based on real-world model projects. The traditional town organized residential areas around a hierarchy of centers, and each center contained mixed uses within a reasonable walking distance of the homes in that district. But are there models of suburban planning that can accommodate the pedestrian, that accommodate automobile use but keep it under control, and reduce sprawl by organizing development around “centers” as developed in the traditional town?

Although a full discussion of possible models is beyond the scope of this Comment, this section presents an overview of particular examples of twentieth century pedestrian-oriented development. The first discussion focuses on a group of pre-World War II models, and this is followed by an overview of very recent projects that are being built or planned for new communities in Indonesia and the United States. The section concludes with a compilation of some of the essential planning principles of these developments. This analysis suggests that these principles could provide heightened specificity for legislation, allowing for a greater correspondence between policy goals and the built response to those goals.

A. Transit-Oriented and Pedestrian-Oriented Developments

1. The Streetcar Suburb

Suburbs have varied broadly in type throughout history, and the terminology used to describe “suburban” and “urban” development patterns has been particularly confused over time. There is a type of suburban community that is compatible with the type of goals underlying Indonesia’s environmental and development growth policy and that in certain aspects offer well-established principles for twenty-first century suburban development. Often referred to as “streetcar suburbs,” these extensions of existing towns and cities were developed around rail stops located along the routes of trolley, streetcar, and other rail lines. The most active period for their development was between 1888 and 1918. Although the

130 See generally SAM BASS WARNER, JR., STREETCAR SUBURBS: THE PROCESS OF GROWTH IN BOSTON 1870-1900 (1962).
131 This overview focuses on U.S. examples of streetcar suburbs, yet the model was widespread throughout the industrialized world. Highly successful examples were built in all major European cities, and many of these pedestrian and transit-oriented communities are among the most desirable suburban environments ever developed.
132 JACKSON, supra note 48, at 114.
dominant house type was a single family home, they were arranged much more densely than were automobile-era suburban houses. Because these communities were developed before the automobile age, the physical form, density, and structure of the town were generally dictated by pedestrian scale. The distance of a reasonable walk to and from the commuter train center set the basic limits of the town’s expansion: “As long as the railroad stop and walking distances controlled suburban growth, the suburb had form.”

Community shops, civic buildings, churches, schools, and public spaces were located near the station stops. These suburban communities shared many of the social and physical features of the traditional town, yet most employed residents worked outside the town in the larger city connected to the suburb by the rail or trolley line. The rail lines also served to connect existing small towns with the new suburbs and the city, providing rail transit networks that were in many ways far more advanced than any existing in the United States today. Transit-supported suburban development was once a significant factor in the United States real estate industry, but the strength of the automobile revolution eventually had enormous impacts on this type of suburban development. For a relatively long period, the private automobile was used as a secondary source of transportation, augmenting suburban transit. But that lasted only as long as the rails were in place, and the United States automobile industry clearly had an interest in acting to remove them as quickly as possible. The effect of this and other efforts to remove rail transit was that millions of Americans who lived in streetcar suburbs were now forced to become automobile commuters, or else move to where they could find work. The age of the freeway soon followed. But those communities fortunate enough to maintain an active commuter rail service have often continued to

133 MUMFORD, supra note 24, at 506.
134 JACKSON, supra, note 48, at 100-02, 122, 152. Virtually every U.S. city established by 1900 had a series of streetcar suburbs, and many of the lines were continually upgraded with faster and quieter train service. Famous examples include Scarsdale, New York; Brookline, Massachusetts; Chevy Chase, Maryland. But most were small suburban villages which would eventually be absorbed into the larger cities by annexation.
135 Between 1926 and 1956, a subsidiary of General Motors operated exclusively to buy existing streetcar systems and convert them to bus lines. After purchasing over one hundred individual rail transit businesses and converting them, the company either closed them down or sold them. JACKSON, supra note 38, at 170. A federal grand jury eventually found criminal conspiracy in these business strategies and fined the corporation $5,000. United States v. National City Lines, 186 F.2d 562 (1951), cert. denied, 341 U.S. 916 (1951). See also Bradford C. Snell, American Ground Transport, Presented to the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, U.S. Senate (Feb. 26, 1974) at 27-34.
develop, and are counted among the most-valued and prestigious suburban communities in the United States.\textsuperscript{136}

2. The Resurgence of Transit-Oriented Developments in the 1990s

By the 1970s, it was becoming clear that the continued proliferation of the automobile-dependent suburb was contributing to a variety of social, economic, and environmental problems.\textsuperscript{137} Substantial public funds were being spent on public transit programs, and cities and counties began once again to project the type of commuter rail projects that supported the streetcar and rail suburb.\textsuperscript{138} As noted, the Indonesian President has committed initial funding to the construction of a metropolitan Jakarta light rail transit system.\textsuperscript{139} But the enormous expense of rail projects has delayed the approval or implementation of many rail projects and has led to the realization that massive infrastructure will not be built quickly. A mixed system of rail, buses, and “para-transit” will likely be needed to serve the wide range of communities. Suburban development decisions that are made now will either support or inhibit the future expansion of public transit networks.

A small number of projects for new mixed-use development are beginning to suggest models for development in targeted urban growth areas. These development projects are related to a growing body of work in North America\textsuperscript{140} and England,\textsuperscript{141} developments that are essentially

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\textsuperscript{136} See generally The Anglo American Suburb, supra note 64, at 23-25, 31, 33, 45. The most famous examples of still-thriving railroad and streetcar commuter developments include: Lake Forest, Illinois (1856); Riverside, Illinois (1869); Garden City, New York (1869); Bronxville, New York (1892); Forest Hills Gardens, New York (1912); Shaker Heights, Ohio (1916).

\textsuperscript{137} See generally THE COSTS OF SPRAWL, supra note 49.

\textsuperscript{138} Michael Leccese, Next Stop: Transit-Friendly Towns, LANDSCAPE ARCHITECTURE, July 1990, at 50, 58. The cities of San Diego, California and Portland, Oregon have made significant progress in building new transit networks, following the lead of cities such as Toronto, where a system of compact suburban development centered on active commercial hubs is being reinforced by its 1991 Strategic Plan.

\textsuperscript{139} Cohen, supra note 42, at 70.

\textsuperscript{140} See U.S. DEPARTMENT OF TRANSPORTATION, URBAN MASS TRANSPORTATION ADMINISTRATION, THE NEW SUBURB: AN EXAMINATION AND ANALYSIS OF RECENT PROPOSALS (1991). The analysis concentrated on the following development projects: Belmont Forest, Leesburg, Virginia; Brambleton, Loudon County, Virginia; Cascades, Loudon County, Virginia; Greendale, Milwaukee, Wisconsin; Kentlands, Gaithersburg, Maryland; Laguna West, Sacramento, California; Lake Park Village, Union County, North Carolina; Lexington Park, Polk County, Florida; Riverside, West Palm Beach, Florida; Sutter Bay, Sutter County, California. Since that study was completed, alternative suburban developments have been projected, including a plan for Montgomery Township, Montgomery Township, New Jersey (1994) and the development projects discussed for Washington State, infra Part IV.A.2.b.

\textsuperscript{141} See, e.g., Leon Krier, Master Plan for Poundsbury Development, 59 ARCHITECTURAL DESIGN
patterned after towns, suburbs, and neighborhoods built before the automobile-dependent suburban age. The pedestrian is emphasized as the center of these plans, and comfortable walking distance is the basic measure for arranging zoning-use groups. Through this traditional set of relationships, the plans attempt to lay the groundwork for suburban communities with a decreased emphasis on the automobile. But they are usually instigated by companies or private groups, not by local government, and in many ways it is at this level that the specifics of land-use policy are currently being formed. What these model projects begin to suggest is not idealized planning but a group of concrete principles that can be codified and used to give form to legislative policy goals.

a. Puri Jaya "Green City" Development, Tangerang, Indonesia

The Puri Jaya project is for a new town within an urban growth area west of Jakarta. Following an international competition in November, 1994, a consortium of planners led by Calthorpe Associates and Daniel Solomon was awarded the contract to plan an alternative suburban town

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46 (1989).

142 One of the most ambitious recent transit-oriented developments in recent years is Laguna West, a 1,045 acre community currently under construction in California. The plan's basic principle is that all essential services of this town (housing, businesses, public spaces) are within easy walking distance of housing. The 100-acre heavily-mixed center is not an automobile-dependent shopping center but a walkable town center, with public spaces, a school, retail stores, and office space are all within walking distance of housing. Urban Land Institute, Laguna West, Sacramento, California, July-Sept. 1994. Architects Peter Calthorpe and Doug Kelbaugh refer to these neighborhood-scale urban forms as "pedestrian pockets," and Calthorpe uses them as the basis for building up the plans at Laguna West, as well as in the plans discussed in this Comment at Tangerang, Indonesia, and at Dupont, Washington.

143 An initial attempt at deducing core principles in these alternative suburban projects is contained in Peter Calthorpe, et al., The Ahwahnee Principles (1991) (unpublished draft, on file with author) by a group of planners and architects that have been instrumental in designing the new communities referred to in this article: Peter Calthorpe, Michael Corbett, Andres Duany, Elizabeth Plater-Zybeck, Stefanos Polyzoides, and Elizabeth Moule.


145 Solomon Associates is an architecture and planning firm with a wide range of clients, but particularly relevant for this discussion is their work in devising environmentally-responsive alternatives for suburban single family housing and in formulating urban affordable housing types. See, e.g., Daniel Solomon, Rallying Around the New Urbanism, 9 PLACES (1994), at 74; Ted Smith, CARTOUCHE, Summer 1991, at 1; Daniel Solomon, Life on the Edge: Toward a New Suburbia, ARCHITECTURAL RECORD, Nov. 1988, at 63, 65, 67; Daniel Solomon, Lessons From California, 7 PLACES (1991), at 75.
Figure 1. Master Plan for Puri Jaya, Tangerang, Indonesia (phase I and II shown). Plan elements include the town center, with a hierarchy of mixed-use neighborhood centers, communal green spaces, greenbelts, and rainwater retention ponds. Shaded areas indicate locations for future phased development. Plan graphic used by permission of Calthorpe Associates.
to accommodate approximately 300,000 residents. The principles set forth in the initial planning proposals\textsuperscript{146} present a further refinement for the transit-oriented development, this time adapted to the conditions of the Indonesian village structure rather than the traditional American town plan. Yet the fundamental principles of pedestrian-oriented planning continue here. Streets are designed to encourage walking, with automobile space and space for pedestrians on a more equal footing than is normal for suburbia. Roads are narrower (decreasing the speed of cars) while sidewalks and plantings are wide. These streets give access to homes and neighborhood business, but also to commonly-owned public spaces dispersed throughout the plan, giving a public focus to each neighborhood (see Figure 1).

The neighborhood, the village, and the greenbelt are the three repeating components of the Indonesian plan, with pedestrian-oriented streets providing an interconnected street network linking housing, commercial, retail, parks, mosques, schools and transit.\textsuperscript{147} The basic repeating unit is the "village" with each of these small communities containing a sampling of all uses in several neighborhoods.\textsuperscript{148} The town center is projected to include the Grand Mosque, a civic auditorium, office space, and pedestrian-oriented shopping, all located near a large central park.\textsuperscript{149} Transit connections to surrounding areas are now limited to bus service, with rail transit links planned in connection with the metropolitan Jakarta system. The Tangerang plan is significant in its application of transit-oriented development principles to a country with a newly-developing economy, analogous to many urbanizing areas across southern and eastern Asia.


This project represents a type of development that was once more common in town planning, involving a large scale planned extension of an existing town.\textsuperscript{150} The normal suburban trend has been to develop an

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\textsuperscript{147} Id. at 7.

\textsuperscript{148} Id. at 8.

\textsuperscript{149} Id. at 10-11.

\textsuperscript{150} Extensions and annexations of existing towns in Washington are having a renaissance of sorts, due in large part to GMA planning goals encouraging this, and to the automatic inclusion of cities within urban growth areas. See WASH. REV. CODE § 36.70A.110(1) (1992). For an overview of the rise and fall of U.S. city annexations of neighboring areas in the nineteenth and twentieth centuries, see JACKSON, supra
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autonomous and private subdivision of essentially single-use housing. The Northwest Landing development involved the property of a single land owner, the Weyerhauser Real Estate Co. ("WRECO"). This tract of 3,500 acres between Tacoma and Olympia was adjacent to the village of Dupont, which currently includes approximately 600 residents on 74 acres. A new comprehensive plan for the town was developed, at the same time that the Washington Growth Management Act was being first developed and implemented. The developer committed to infrastructure costs totaling approximately $60 million, in addition to committing to spending $19.4 million for two new schools to serve both existing and new residents.

WRECO hired a planning and architectural team that projected a pedestrian-oriented community based on many of the same principles as the models discussed above. Rather than featuring the typical suburban streetfront pattern dominated by garage doors and curb cuts, design guidelines and building codes encourage builders to recess garages behind the street wall of houses or locate them on alleys at the rear of houses. Front yard setback requirements are relaxed substantially if houses include street-facing porches, and shade trees are mandated at set intervals, based on dimensions established by traditional American residential streets of the pre-automobile age. The resulting streetscape is one of tree-lined, basically straight streets, framed by house porches and entries, with automobile space recessed. While only in its second year of construction in a twenty year

note 48, at 173-56.


154 These principles include: heavily mixed uses, with as much housing as possible within reasonable walking distance of the town center, new employment, transit, civic spaces, and commercial uses; a broad range of housing types and purchase prices; pedestrian-focused design guidelines, including specific provisions for alley automobile access or garages placed away from the pedestrian streets; bonuses for the inclusion of street-facade elements such as front porches and prominent entries, establishing a more direct connection between houses and pedestrian space. Id. at 10, 11, 21. While narrow streets and alleys were once common in streetcar suburb-type extensions of U.S. cities, many jurisdictions have prohibited their use in planning based on concerns about fire truck access. The Dupont plan, as well as the Laguna plan, includes alleys and narrower streets but also includes fully-sprinklered housing. The increase in housing costs are offset considerably by a decrease in house insurance for sprinklered buildings. A project involving the same developer, consultants, and general planning principles is being developed as an extension of the historic town of Snoqualmie, Washington. See CITY OF SNOQUALMIE, SNOQUALMIE RIDGE MASTER PLAN (Oct. 1995).
plan, the project has enjoyed considerable commercial success.\(^{155}\)

c. **The Kentlands, Gaithersburg, Maryland**

The Kentlands is a 352-acre "traditional neighborhood development" ("TND") under the jurisdiction of the city of Gaithersburg, with zoned capacity for two million square feet of commercial space and 1,655 residential units in a variety of housing types.\(^{156}\) A brief description is included here to provide a slightly different application of traditional planning principles than those featured in the other projects outlined.\(^{157}\)

The direct models for the plan are Annapolis, Maryland and the Georgetown district of Washington, D.C., where a dense grid of tree-lined streets, interspersed public greens, and service alleys are designed around the concept of pedestrian movement as primary generator of urban form.\(^{158}\)

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155 The plan was awarded the following statewide honors by a prominent industry group, the Master Builders Association of Washington: "Best Master Planned Community of the Year"; "Best Community Land Use Plan"; "Best Design for a detached Home With an Average Published Price Under $150,000." Seattle Times, Nov. 5, 1995, at G10. A key component of the plan involves attracting employers to the development, and the initial Dupont Comprehensive Plan goal of introducing 6,000 new jobs into the new extension of Dupont by 2012 will very likely be achieved before the year 2000. In addition to the State Farm Insurance Company already completing a major new facility in the town, Intel Corp. has committed to constructing a new manufacturing and office complex. Site work began in November 1995 on the 192-acre development, with the project expected to employ 6,000 new workers by the year 2000. The Dupont pedestrian-oriented, mixed use community succeeded in luring Intel Corp. following a highly competitive battle between various U.S. suburban locations. Intel to Build Plant, Offices in Du Pont, Seattle Daily Journal of Commerce, Sept. 18, 1995, at A1.

156 The Urban Land Institute Project Reference File, Kentlands, Gaithersburg, Maryland, Oct.-Dec. 1994.

157 The Kentlands project shares many of the underlying principles of the developments noted above, but features an increased emphasis on strict design guidelines for individual single family and multifamily residential buildings. The architectural/planning firm for the Kentlands, Duany, Plater-Zyberk, has devised a growing list of zoning and building ordinances for new communities that are based on traditional, pedestrian-oriented town plans. See, e.g., Andres Duany & Elizabeth Plater-Zyberk, New Town Ordinances and Codes, 59 Architectural Design 71-75 (1989). Duany and Plater-Zyberk planned and were responsible for the formulation of the zoning ordinance for the town of Seaside, Florida, an early built example of what some have referred to as "neotraditional" planning, based in many ways on pre-World War II town planning ordinances. See generally Andres Duany & Elizabeth Plater-Zyberk, Town Planning Principles (1993).

158 Edward Gunts, Plan Meets Reality, Architecture, Dec. 1991, at 74. Small zoning lots, narrow street widths, and very shallow yard setbacks are similar to traditional town plan requirements of the pre-automobile age. These features are repeated in the Kentlands plan, allowing for greater density around the commercial town center, decreased walking distance to shopping and employment and to a projected light rail station at the center. Id. at 117. The density is a result of the small lot sizes and the narrow street widths permitted by the planning ordinance, resulting in lower per-unit construction costs. The planning ordinance also allows for the construction of large houses, apartment buildings, mixed-use buildings and alley garages with second-level apartments. Urban Land Institute, supra note 181, at 1. These legal specifications, although common in pre-World War II town ordinances and plans, required
This is in response not only to urban design considerations, but to the planning goal of including a broad range of housing prices within the community. And the emphasis upon indigenous, traditional architectural elements has important implications for Indonesian residential codes. This emphasis is not born out of nostalgia for a remote past, but out of the realization that evolved building customs are often based on sound principles of energy-efficiency and as a response to local climate and culture.

d. Master Plan for a New Town in the Philippines

Although construction of this new town has not yet started, the scale of this project is remarkable, as is its potential significance as an alternative model for new mixed-use development in developing countries. Projected to accommodate an ultimate population of over 400,000 citizens, the site is owned by a single entity that chose to hire a planning team committed to pedestrian-oriented planning. Similar to the Tangerang plan and its use of the village structure to order neighborhoods surrounding a town center, the essential building block of the Philippines project is the barangay, or village, each with its own mixed-use core. The size of these villages is based on the reasonable walking or bicycling distance between the center and housing in each barangay. The larger Town Center serves the entire population, and is projected to include major commercial and civic buildings.

As with the Tangerang plan, a complex greenbelt system separates districts and heavily-used arterials from pedestrian-oriented routes, but also provides for recreation areas and major parks, rainwater detention ponds, considerable effort on the part of the planners and consultants in convincing the city of Gaithersburg that the fire safety and automobile access in the district would be adequate. The local fire department agreed to permit narrower streets and alley access if buildings on those streets included fire sprinklers. This was also the stipulation at Dupont, Washington and at Laguna, California. The effort succeeded, and the city has since incorporated the devised codes into a newly created zoning designation to govern the long-term development of the district. Gunts, supra, at 116-117.


160 This is also related to the use of neighborhood planning structure used at the Kentlands, Dupont and Laguna projects.

161 Calthorpe, supra note 159, at 9.

162 Calthorpe, supra note 159, at 6.
and biotic waste water treatment facilities. Also similar to the Tangerang scheme is the Plan's integration of drainage ponds and canal systems and attention to the separation of waste water from filtered ground water, a major environmental issue in areas relying on septic systems and well water. The structure of the new town is further built up around a system of transit routes, including dedicated jeepney and bus routes feeding into the Town Center, projected to include a rail link with Alabang and Manila.

B. Articulated Principles as a Means of Reinforcing Planning Goals

Planning goals are not merely wish lists: jurisdictions that ignore them or misinterpret them when planning invite lawsuits and the potential invalidation of those plans. Clarity of legislative intent is thus critical in any efficient planning and in the implementation of those plans. The projects reviewed in this Comment are significant for their potential contribution to the articulation of growth management policy. While not intended as the only "correct" bases for generating principles, they begin to suggest a level of specificity that is required for legislation if it is to realize its growth planning goals and move beyond rhetorical policy.

Indonesia's planning and policy goals are listed below, drawn from the sources cited in this Comment. Listed after these goals are compatible planning goals from Washington's GMA, used here as a representative distillation of State growth management planning goals. These goals are followed by more developed policy principles suggested by the models outlined in this Comment. It is this writer's opinion that articulated principles such as these can add necessary direction to the goals, yet allow for sufficient flexibility in implementation at the local level.

Existing Indonesian goals are intended for: the protection of essential natural resources, including air, water, and soil; the conservation of wilderness areas, agricultural and resource lands, and industries; encouragement development in urban areas; to encourage economic development transit use; and for the integration of affordable housing in all new developments.

Compatible existing goals from U.S. jurisdictions include:

163 Calthorpe, supra note 159, at 10.
164 Calthorpe, supra note 159, at 22.
165 Karp, supra note 7, at 55.
166 Calthorpe, supra note 159, at 17.
discouraging suburban sprawl; concentrating development in urban areas; containing growth and separating it from wilderness and resource lands by reinforcing the Urban Growth Boundary concept; planning for concentrated centers of development activity within the designated growth areas.

Planning principles that would more clearly articulate these goals include:

1. Focusing development around a hierarchy of neighborhood centers that encourages and facilitates (rather than hinders) the establishment of an efficient transit network.

2. Planning new development within designated growth areas as components that contribute to an integrated hierarchy of centers, with the larger centers containing mixed uses that include housing, shopping, schools, employment, and civic uses.

3. Planning new neighborhoods and communities so that the majority of housing is located within reasonable walking distance of convenience shopping and active transit stops, and where practical within walking distance of employment opportunities and services.

4. Planning new neighborhoods and communities so that housing is organized around public "commons," parks and other open space (including preserved wetlands sites), encouraging community focus as well as allowing for more efficient drainage and filtration of rainwater.

5. Encouraging walking and bicycling as a form of transportation; decrease automobile speeds through neighborhoods; discourage conflicts between automobiles and pedestrians by: decreasing the width of residential streets, and by allowing alley access to rear and side garages.

6. Improving air quality and reduce traffic congestion by planning for a hierarchy of town centers, neighborhood commercial centers, residential centers linked efficiently by transit.

7. Providing for affordable housing opportunities convenient to all neighborhoods by reducing the lot sizes of single family housing, decreasing yard setbacks, allowing the use of alley-access apartments above garages, by reducing the size of single family zones and allowing multifamily zones to alternate more freely with single family, and allowing mixed-use residential/commercial
development near community centers.

(8) encouraging economic development in existing urban areas, conserve existing buildings, and reduce automobile dependence by providing incentives to encourage new business and retail expansion in existing neighborhood and town centers areas.

(9) discouraging the development of new automobile-dependent commercial areas that are isolated from town or neighborhood centers.

V. CONCLUSION

Planning goals, absent specific town building principles that are officially incorporated into law, will continue to be subject to confused or unsympathetic implementation at the local level. The planning goals of both Indonesia and United States jurisdictions are regional in scope, addressing concerns that have ramifications far beyond local planning jurisdictions. The principles underlying the model projects discussed above begin to give form to planning policy, providing physical references to these central goals. The intentions behind growth planning goals are often at odds with the interpretation of local officials. Besides seriously reducing the effectiveness of the legislation, this disparity between policy and realization disrupts public and private planning activities and imposes considerable financial burdens on taxpayers and litigants. Greater definition in reaching broad policy goals leads to greater certainty for developers and communities, a valuable element when complex legal permitting and environmental reviews are crucial to a project's success. This will be increasingly true for Indonesia and elsewhere, as land development inevitably becomes subject to more complex restrictions.